**IT Applications, Unit 4**

**Ch 4, Goals of information systems, p 137-**

1. **What is the role of a strategic plan?**

The role of a strategic plan is to identify long-term goals within an organisation.

1. **Explain the purpose of a mission statement.**

To establish a set of common goals that will help accomplish the organisation’s aims.

1. **Distinguish between an organisations goals and its objectives.**

* **Organisational goals:** common goals that will help accomplish the organisations goals.
* **Objectives:** Small achievable tasks undertaken to accomplish a big task (i.e. organisational goals).

Organisational goals and objectives often relate to improving the efficiency or effectiveness of operations.

**Improving efficiency**

1. How is efficiency measured?

Efficiency is measured in terms of time, cost and effort.

1. With an eg. illustrate how an organisational change will lead to improved efficiencies.

Sales reps for a company once had to visit fax rural stores to promote products and announce monthly promotions. Now the sales reps can email a PDF file or a link to the sale information to the store manager rather that visiting or sending a fax.

Saves *time* by communicating information, no longer have to travel as frequently or as far.

Cost of travel and sending a fax is eliminated, thus the *cost* is minimised. Less *effort* is needed to email the required information to a distribution list of stores.

**Improving effectiveness**

1. How is effectiveness defined?

Effectiveness is defined in terms of appearance, readability, completeness, clarity, accuracy, accessibility, timelessness, communication, relevance and useability.

**Improving decision-making**

1. What three factors are required for competent decision-making?
2. **Information –** sufficient information
3. **Communication**
4. **Time –** presented in a timely manner

**Types of information systems**

(You are not required to know for exam purposes the specific types of information systems).

Briefly, note the characteristics of each of the following 5 systems:

1. **Transaction processing systems**

Processes data generated by the day-to-day transactions of an organisation. Examples are billing systems, inventory control systems.

1. **Office automation systems**

Performs routine office tasks, such as printing docs, tracking schedules, making calculations, etc.

1. **Management information systems**

Refers to a computer network that generates timely and accurate information for managing an organisation. Often integrated with a TIS

1. **Decision-support-systems**

Allows users to manipulate data directly and too incorporate data from external sources. A DSS is designed to help managers make non-routine decisions. Used to create decision models and make queries.

1. **Expert systems**

Designed to analyse data and produce a recommendation or decision. The knowledge of an expert about a particular type of decision is captured is a set of facts.

**Problem-solving methodology relating to the analysis of ongoing information problems**

1. What is an information problem?

An information problem is a complex problem that requires a methodical and systematic approach. To solve an information problem, we need to understand what the problem is and why it has occurred.

**Information problems arise because of:**

1. **Inefficient procedures**
   1. **What is meant by this term.**

Efficiency refers to time, cost and effort so an inefficient procedure is a procedure that doesn’t cover these things in the most productive way. A inefficient procedure could result in data taking too long to be entered, to generate reports, retrieve data from one system and enter it in another.

1. **Failure to meet the needs of users**
   1. **Why do errors occur in systems?**

Errors occur in systems mainly when human input is needed, e.g. poor programming and failure to carry out regular updating of data.

1. **Problems due to dependence on old technology**
   1. What type of opportunities do developments in new technology present?

Provides different ways of processing data. For example, a single person using digital technology can produce an animated feature-length movie that in the past would have taken hundreds of people to produce.